What is claimed:

1. A catheter assembly for treatment of cardiac arrhythmia comprising:

a catheter body including:

a proximal portion,

an intermediate portion extending from the proximal portion and defining a longitudinal axis,

a distal portion extending from the intermediate portion and forming a helix,

a first lumen extending from the proximal portion to the distal portion,

an ablation section formed along the coil and defining a loop transverse to the longitudinal axis, the ablation section being formed of a microporous material in fluid communication with the first lumen to irrigate fluid from the first lumen to an exterior surface of the ablation section;

at least one electrode associated with the ablation section; and

a fluid source for supplying a liquid to the first lumen;

wherein upon activation, the electrode supplies an ablation energy to fluid irrigated to the exterior surface of the ablation section for ablating a continuous, closed lesion pattern.

2. The catheter assembly of claim 1, wherein the ablation section is formed of a microporous polymer.

3. The catheter assembly of claim 2, wherein the microporous polymer is high density, expanded PTFE.

4. The catheter assembly of claim 1, wherein the ablation section has a straightened length in the range of 2 - 8 inches.

5. The catheter assembly of claim 1, wherein the at least one electrode is disposed within the first lumen at the ablation section.

6. The catheter assembly of claim 5, wherein the at least one electrode includes a coil electrode.

7. The catheter assembly of claim 5, wherein the at least one electrode includes a plurality of coiled electrodes.

8. The catheter assembly of claim 5, wherein the at least one electrode has a length approximating a length of the ablation section.

9. The catheter assembly of claim 5, wherein the at least one electrode has a length slightly greater than a length of the ablation section.

10. The catheter assembly of claim 1, wherein the loop defines a loop axis, the loop axis and the longitudinal axis being substantially parallel.

11. The catheter assembly of claim 1, further comprising:

a shaping wire coaxially maintained by the catheter body, the shaping wire including a proximal segment and a distal segment, the distal segment formed of a shape memory material configured to revert to helical shape;

wherein the distal segment selectively shapes the distal portion as a helix.

12. The catheter assembly of claim 11, wherein the shaping wire is slidably disposed within the first lumen.

13. The catheter assembly of claim 11, wherein the catheter body further includes a second lumen extending from the proximal portion to the distal portion, and further wherein the shaping wire is slidably disposed within the second lumen.

14. The catheter assembly of claim 11, further comprising:

a guide catheter forming a lumen sized to slidably receive the catheter body and terminating at an opening, the catheter body being moveable between a retracted position in which the distal portion is proximal the opening and a deployed position in which the distal portion is distal the opening.

15. The catheter assembly of claim 1, further comprising:

a guide wire coaxially maintained by the catheter body, the guide wire being selectively moveable relative to the catheter body and including a proximal section and a distal section;

wherein in a deployed position, the distal section of the guide wire is substantially concentric with, and extends distally beyond, the helix formed at the distal portion of the catheter body.

16. The catheter assembly of claim 1, further comprising:

a sensing electrode positioned along the helix distal the ablation section for sensing tissue conductivity.

17. The catheter assembly of claim 1, further comprising:

a sensing electrode positioned along the helix proximal the ablation section for sensing tissue conductivity.

18. The catheter assembly of claim 1, wherein the loop is axially compressible to an axially compressed position following contact with a tissue wall, and further wherein the loop is configured to be substantially planar in the axially compressed position.

19. The catheter assembly of claim 1, wherein the loop is axially compressible to an axially compressed position following contact with a tissue wall, and further wherein the loop is configured to be non-planar in the axially compressed position.

20. The catheter assembly of claim 19, wherein the loop is configured to have a saddle shape in the axially compressed position.

21. The catheter assembly of claim 1, further comprising:

a delivery catheter having a distal locator and forming a catheter body lumen terminating at an opening proximal the distal locator;

wherein the catheter body is slidably disposed within the catheter body lumen such that the catheter body is selectively deployable and retractable relative to the distal locator via the opening.

22. The catheter assembly of claim 21, wherein the delivery catheter is configured to be selectively bendable distal the opening.

23. The catheter assembly of claim 21, wherein the delivery catheter includes a steering device for selectively bending the distal locator.

24. A catheter assembly for treatment of cardiac arrhythmia comprising:

a catheter body including:

a proximal portion,

a distal portion comprised of a flexible material,

an ablation section defined along the distal portion,

a first lumen extending from the proximal portion to the distal portion;

at least one electrode associated with the ablation section; and

a shaping wire moveably disposed within the first lumen, the shaping wire including a proximal segment and a distal segment, wherein the distal segment is formed of a shape memory material configured to revert to a helical shape;

wherein upon advancement of the distal segment within the distal portion, the distal portion assumes the helical shape of the distal segment and the ablation section forms a loop.

25. The catheter assembly of claim 24, wherein the shaping wire further includes an intermediate segment between the proximal and distal segments, the intermediate segment defining a longitudinal axis, and further wherein the helical shape extends transversely relative to the longitudinal axis.

26. The catheter assembly of claim 24, wherein the catheter body further includes an intermediate portion between the proximal and distal portions, the intermediate portion defining a longitudinal axis, and further wherein upon advancement of the shaping wire within the catheter body, the loop defines a loop axis, the loop axis and the longitudinal axis being substantially parallel.

27. The catheter assembly of claim 24, wherein the at least one electrode includes a coil electrode wound about at least a portion of the distal segment of the shaping wire.

28. The catheter assembly of claim 24, wherein the loop is axially compressible to an axially compressed position following contact with a tissue wall, and further wherein the shaping wire is configured such that the loop is substantially planar in the axially compressed position.

29. The catheter assembly of claim 24, wherein the loop is axially compressible to an axially compressed position following contact with a tissue wall, and further wherein the shaping wire is configured such that the loop is non-planar in the axially compressed position.

30. The catheter assembly of claim 29, wherein the loop is configured to have a saddle shape in the axially compressed position.

31. The catheter assembly of claim 24, further comprising:

a plurality of shaping wires each independently moveable within the first lumen and defining a proximal segment and a distal segment;

wherein a shape of the respective distal segments is different.

32. The catheter assembly of claim 31, wherein the respective distal segments are configured to define varying sized loops.

33. The catheter assembly of claim 31, wherein each of the distal segments are axially compressible to an axially compressed position, and further wherein a first one of the respective distal segments defines a substantially planar loop in the axially compressed position and a second one of the respective distal segments defines a non-planar loop in the axially compressed position.

34. The catheter assembly of claim 24, wherein the ablation section is formed of a microporous material in fluid communication with the first lumen to irrigate liquid from the first lumen to an exterior surface of the ablation section.

35. The catheter assembly of claim 24, further comprising:

a guide catheter having a lumen sized to slidably receive the catheter body and terminating at an opening, the catheter body being moveable between a retracted position in which the distal portion is proximal the opening and a deployed position in which the distal portion is distal the opening.

36. The catheter assembly of claim 24, further comprising:

a guide wire coaxially maintained by the catheter body, the guide wire being selectively moveable relative to the catheter body and including a proximal section and a distal section;

wherein in a deployed position, the distal section of the guide wire is substantially concentric with, and extends distally beyond, the helix formed in the distal portion.

37. The catheter assembly of claim 24, further comprising:

a sensing electrode positioned along the helix distal the ablation section for sensing tissue conductivity.

38. The catheter assembly of claim 24, further comprising:

a sensing electrode positioned along the helix proximal the ablation section for sensing tissue conductivity.

39. The catheter assembly of claim 24, further comprising:

a delivery catheter having a distal locator and forming a catheter body lumen terminating at an opening proximal the distal locator;

wherein the catheter body is slidably disposed within the catheter body lumen such that the catheter body is selectively deployable and retractable relative to the distal locator via the opening.

40. A catheter assembly for treatment of cardiac arrhythmia comprising:

a catheter body including:

a proximal portion,

an intermediate portion extending from the proximal portion and defining a longitudinal axis,

a distal portion extending from the intermediate portion and comprised of a flexible material,

a first lumen extending from the proximal portion to the distal portion,

an ablation section formed along the distal portion and formed of a microporous material in fluid communication with the first lumen to irrigate fluid from the first lumen to an exterior surface of the ablation section;

at least one electrode associated with the ablation section;

a fluid source for supplying a fluid to the first lumen; and

a shaping wire slidably disposed within the catheter body, the shaping wire including a proximal segment and a distal segment, wherein the distal segment is formed of a shape memory material configured to revert to a helical shape such that upon advancement of the distal segment within the distal portion, the distal portion assumes the helical shape of the distal segment and the ablation section forms a loop transverse to the longitudinal axis;

wherein upon activation, the electrode supplies an ablation energy to fluid irrigated to the exterior surface of the ablation section for ablating a continuous, closed lesion pattern.

41. A method for forming an ablation pattern to electrically isolate a vessel from a chamber, the vessel having an ostium formed at a chamber wall, for treatment of cardiac arrhythmia, the method comprising:

selecting a catheter assembly including a catheter body, a first shaping wire, and at least one electrode, the catheter body including a proximal portion, a distal portion, and a first lumen extending from the proximal portion through the distal portion, the distal portion including an ablation section, wherein the first shaping wire is selectively disposed within the first lumen and includes a proximal segment and a distal segment formed to selectively assume a first helical shape, and further wherein the at least one electrode is associated with the ablation section;

guiding the distal portion into the chamber;

forming the distal portion to a helical configuration with the distal segment of the shaping wire such that the ablation section forms a loop;

directing the distal portion such that the ablation section contacts the chamber wall about the vessel ostium; and

energizing the electrode to ablate a continuous, closed lesion pattern about the vessel ostium to electrically isolate the vessel from the chamber.

42. The method of claim 41, wherein selecting a catheter assembly includes:

providing a second shaping wire having a distal segment formed to selectively assume a second helical shape different from the first helical shape;

evaluating a shape of the vessel ostium; and

selecting one of the shaping wires based upon the evaluation of the vessel ostium.

43. The method of claim 42, wherein the second helical shape is saddle-shaped and evaluating a shape of the vessel ostium includes determining that the vessel ostium is saddle-shaped, and further wherein selecting one of the shaping wires includes selecting the second shaping wire.

44. The method of claim 42, wherein the first shaping wire is selected for use in ablating a pattern to electrically isolate a first pulmonary vein, the method further comprising:

retracting the first shaping wire from the catheter body;

inserting the second shaping wire into the first lumen;

directing the ablation section into contact with the tissue wall about an ostium of a second pulmonary vein; and

energizing the at least one electrode to ablate a continuous, closed lesion pattern about the ostium of the second pulmonary vein to electrically isolate the second pulmonary vein from the chamber.

45. The method of claim 41, wherein the catheter assembly further includes a guide catheter having a lumen terminating at an opening, the guide catheter coaxially maintaining the catheter body such that the catheter body is slidable between a retracted position in which the distal portion is proximal the opening and a deployed position in which in the distal portion is distal the opening, and further wherein forming the distal portion to a helical configuration includes sliding the catheter body to the deployed position.

46. The method of claim 41, wherein the catheter body further includes a second lumen extending from the proximal portion to the distal portion and a guide wire slidably disposed

within the second lumen, the guide wire including a proximal section and a distal section, the method further comprising:

extending the distal section of the guide wire distal the distal portion of the catheter body after forming the distal portion to the helical configuration; and

locating the vessel with the distal section of the guide wire.

47. The method of claim 41, wherein the ablation section is formed of a microporous material in fluid communication with a fluid source for irrigating liquid from the fluid source to an exterior surface of the ablation section, the method further comprising:

activating fluid flow from the fluid source to the ablation section prior to guiding the distal portion into the chamber.

48. The method of claim 47, wherein energizing the electrode includes applying an ablation energy to the fluid irrigated to the exterior surface of the ablation section.

49. The method of claim 41, further comprising:

viewing the chamber with a fluoroscope prior to energizing the electrode to confirm sufficient contact between the ablation section and the chamber wall.

50. The method of claim 41, wherein the catheter assembly further includes a first sensing electrode located along the distal portion, the first sensing electrode being positioned such that upon compression of the distal portion against the chamber wall, the first sensing electrode is within an area defined by the loop, the method further comprising:

sensing tissue conductivity with the first sensing electrode to evaluate an extent of ablation.

51. The method of claim 50, wherein the catheter assembly further includes a second sensing electrode located along the distal portion, the second sensing electrode being positioned such that upon compression of the distal portion against the chamber wall, the

second sensing electrode is outside an area defined by the loop, the method further comprising:

sensing tissue conductivity with the second sensing electrode to evaluate an extent of ablation.

52. The method of claim 41, further comprising:

deflecting the distal portion relative to the proximal portion such that the loop is aligned with a right pulmonary vein ostium.

53. The method of claim 41, wherein the catheter assembly further includes a delivery catheter having a distal locator and forming a catheter body lumen terminating at an opening proximal the distal locator, the catheter body being slidably disposed within the catheter body lumen such that the catheter body is deployable and retractable through the opening, the method further comprising:

locating the vessel with the distal locator.

54. The method of claim 53, further comprising:

deploying the distal portion of the catheter body after locating the vessel.

55. The method of claim 53, wherein the delivery catheter is configured to be deflectable proximal and distal the opening, and further wherein locating the vessel includes:

bending the delivery catheter proximal the opening; and

bending the delivery catheter distal the opening.

56. A method for forming an ablation pattern to electrically isolate a vessel from a chamber, the vessel having ostium formed at a chamber wall, for treatment of cardiac arrhythmia, the method comprising:

selecting a catheter assembly including a delivery catheter, an ablation catheter and at least one electrode, wherein the delivery catheter includes a lumen terminating at an opening and a distal locator extending distal the opening, and further

wherein the ablation catheter includes a proximal portion and a distal portion that selectively assumes a helical shape and includes an ablation section forming a loop, and further wherein the at least one electrode is associated with the ablation section;

guiding the distal locator into the chamber;

locating the vessel with the distal locator;

deploying the distal portion from the opening;

advancing the distal portion over the distal locator such that the ablation section contacts the chamber wall about the vessel ostium; and

energizing the electrode to ablate a continuous, closed lesion pattern about the vessel ostium to electrically isolate the vessel from the chamber.

57. The method of claim 56, wherein extending the distal portion over the distal locator includes concentrically positioning the distal locator within the loop.

58. The method of claim 56, wherein the ablation catheter further includes a lumen slidably maintaining a shaping wire having a proximal segment and a distal segment, the distal segment formed to selectively assume a helical shape and to direct the distal portion to a corresponding helical shape upon final assembly, wherein deploying the distal portion includes:

forming the distal portion to the helical shape with the distal segment.

59. The method of claim 58, wherein selecting a catheter assembly further includes:

providing a plurality of shaping wires each having differently shaped distal segments;

evaluating a shape of the vessel ostium;

selecting one of the plurality of shaping wires based upon the evaluation of the vessel ostium; and

inserting the selected one of the plurality of shaping wires into the lumen.

60. The method of claim 56, wherein the ablation section is formed of a microporous material in fluid communication with a fluid source for irrigating fluid from the fluid source to an exterior surface of the ablation section, the method further comprising:

activating fluid flow from the fluid source to the ablation section prior to guiding the distal portion into the chamber.

61. The method of claim 60, wherein energizing the electrode includes applying an ablation energy to the fluid irrigated to the exterior surface of the ablation section.

62. The method of claim 60, further comprising:

viewing the chamber with a fluoroscope prior to energizing the electrode to confirm sufficient contact between the ablation section and the chamber wall.

63. The method of claim 56, wherein the ablation catheter further includes a first sensing electrode located along the distal portion, the first sensing electrode being positioned such that upon compression of the distal portion against the chamber wall, the first sensing electrode is within an area defined by the loop, the method further comprising:

sensing tissue conductivity with the first sensing electrode to evaluate an extent of ablation.

64. The method of claim 63, wherein the ablation catheter further comprises a second sensing electrode located along the distal portion, the second sensing electrode being positioned such that upon compression of the distal portion against the chamber wall, the second sensing electrode is outside an area defined by the loop, the method further comprising:

sensing tissue conductivity with the second sensing electrode to evaluate an extent of ablation.

65. The method of claim 56, further comprising:

deflecting the distal locator such that the loop is aligned with a right pulmonary vein ostium.